

The effect of different antibiotics on gram-negative bacteria culture

[Science](#), [Biology](#)



The gram-negative cell structure makes it difficult to stain therefore causing resistant effects on the antibiotics developed. The outer membrane prevents the penetration of stains. Lipopolysaccharide layer is the pathogenic component of the gram-negative (Gibbons and Murray 6). The major concern about the gram-negative effect on the antibiotics is the resistance ability.

The germs are able to develop a lot of resistance to antibiotics. The resistance is about cytokine-producing immune system activation. The outer wall also acts as a protective layer, therefore, preventing the entry of pathogens into the cell, which also locks out most of the antibiotics, dyes, and detergents (RS 112). The outer wall is also endotoxin which it enters the body causes toxic infections.

To avoid the problem of resistance scientists are forced to revisit drugs that were abandoned in the 1940s. The only concern is that colistin and polymyxin B have effects on the kidney and nervous system. Since the drugs were abandoned a long time ago, scientists believe that gram-negative bacteria have not developed any form of resistance to these drugs. Most of the gram -ve bacteria cause pneumonia, urinary tract, and other bloodstream infections.

Works Cited

Baron S, Salton MRJ, Kim KS. Medical Microbiology (4th ed.). Texas: Univ of Texas Medical Branch, 1996.

Gibbons, N. E., and R. G. E Murray. " Proposals Concerning the Higher Taxa of Bacteria." International Journal of Systematic Bacteriology (1978): Vol 28 Issue No 1 1-6.

POLLACK, ANDREW. Rising Threat of Infections Unfazed by Antibiotics. 26

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RS, Gupta. " The natural evolutionary relationships among prokaryotes." Crit. Rev. Microbiol (2000): Vol 26 Issue No 2 111-131.